No 17

No 16

An Inaugural Dissertation on CHOLERA INFANTUM.

Submitted to the Examination of the
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The Trustees & Medical Faculty of the
University of Pennsylvania.
For the Degree of Doctor of Medicine
On the 27th. day of October 1822.

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Passed March 27th. 1823

Cholera Infantum.

Cholera Infantum is a disease that demands the serious attention of every Practitioner of Medicine in the United States, not only from its prevalence in the hot seasons, but from the mortality by which its progress may sometimes be traced.

From the cursory view which I have taken of some of the European writers who have written on the diseases of children, I have been unable to find any one that corresponds in every feature to that under consideration.

True it is that in Europe (at least the part with which I was acquainted) children are frequently distress'd by bowel complaints, sometimes very tedious in their course; nay even fatal in their termination. From the circumstance that in the countries of Europe as well as here, very old matron & indeed very young one who has been

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the mother of one or two children, thinks herself sufficiently qualified to treat those infant cases, while the Physician is never called in till after every old woman's cure has been tried, & every nostrum administered, without any regard to time, quantity or quality; & the case becomes almost if not entirely irremediable.

Still however there is not one of those bowel complaints similar to the disease of which we are treating; they want those distinguishing marks & peculiarities, by which Cholera Infantum is characterized.

It is indeed a difficult task in, many instances, to give to diseases their true nosological titles & situations.

The only disease that I saw while in Europe, which could claim alliance in any way to Cholera Infantum

is a Diarrhoea which might be denominated bilious: from its being sometimes, tho' not invariably accompanied by a slight vomiting of bile, & the facal discharges also mixed with an unnatural quantity of the same secretion — but even these symptoms do not constitute Cholera Infantum. For, the vomiting if at all present, is neither so violent, nor of such continuance as in Cholera; besides what I have denominated the bilious Diarrhoea, may occur at any season whenever the exciting cause is applied — Whereas the Chol. Infant. appears only in the extremely hot weather between June & September. This serves as another line of distinction between these diseases

And again when we consider the numerous ways by which Diarrhoea may be caused, — As cold applied to the surface of the body, or suddenly alternating

with

with heat — [illegible] the most probable
[illegible] remedy — [illegible]
[illegible] of death.
[illegible] of [illegible] & [illegible]
that it is Therapeutic [illegible]
[illegible] may be added [illegible] continuing
[illegible]
[illegible] children [illegible]
is denominated Diarrhoea [illegible].
[illegible]
[illegible] in a similar way as to adults —
where after the [illegible] the Patient has
discharged the [illegible] that [illegible]
the [illegible] of the intestinal [illegible]
[illegible] by a Diarrhoea —
[illegible] generally [illegible]
[illegible] leaving the Patient to
return to his [illegible].

But my opinion is that not one of the
many causes of Diarrhoea which have been

men-

[illegible] "[illegible] more [illegible] [illegible]
(if necessary) to induce, and prove
the [illegible] "[illegible] or [illegible] [illegible]
however they may tend, as they most undoubtedly do, to aggravate the disease.

"But does dentition or worms which have been accused as the most prominent exciting, ever cause the disease? I would say, not — For, dentition as frequently happens in Winter or Spring as in Summer or Fall & Cholera Infantum does not follow at those seasons; tho' the irritation must be as great & worms are not the cause, for none have been found in cases that have terminated — Intestinal and other symptoms of derangement have been found in the bowels. The Neuroses & Commentary have been found very prominent & Intus-susceptio & Invagination of the intestines have been frequently discovered.

Ex.

It is a settled point in the medical world that cold applied to the body will produce Colds, Pneumonia, Rheumatism, Diarrhoea &c. according as the one or the other of these parts is more susceptible to a sudden chill of Perspiration.

On the same principle does the inspiration which is the most part commences suddenly in the latter part of May, & continues till June, not unfrequently in a tender lung & injury, deranging not only the Stomach and Bowels, but the Nervous Debility is generally brought on & sympathize, & thus the disease of Dyspepsia is produced.

Thus the man is ultimately consumed, the heat & moisture more than it proves fatal, when the Thermometer ranges many degs. higher; the reason is obvious — It requires

consid-

considerable time in the city, to accommodate it to our present usage.

If indeed, an Act may produce sudden transitions, how much more must a Pitman be, where a greater availability to landowners of the aboriginal canal are so easily secured into action.

Lord Chancellor, I have a motive serves me mentioning it, as being a disease almost if not entirely peculiar to the United States, the same idea I have endeavoured to substantiate which now is perceived in the Treasury Remarks.

Indeed I think it is a distinct disease, equally incurable with the difference in the other total possibility of circulation as we see it, or in other countries.

In the Capitular Gift of it to the late (Pitman * etc. can be added.

Pitt

* Ad. Cur. & Leg. Vol. 1st. Pa. 155. 2nd. Edit.

a common to carina. First it is due
rather to appearance in Thursday in the
the middle or low or beginning of July.
(It is not rare in the first of the 4th, 2,
it continues till was the middle of October,
& its frequency & change are always proportion
to the seat of the matter.

It appears
from the first & second week after birth. But
then are two years old it sometimes appears
at intervals upon nothing for days at any
stated or simple or indigestion, but it
more frequently comes in with a violent vomiting
& purging & a high fever."

Nothing can be more varied
than the consistence of the discharges, from the
bowels & the manner in which they are passed.

I have seen the child without
any or scarcely pain, but at other times

when

when the lungs are much inflated or are inflated with air they will [illegible] quantity of air [illegible] extremely [illegible] exposed to a considerable pressure [illegible] in much larger quantity [illegible] a quite [illegible].

The fibres of the intestines may be [illegible] to contractions [illegible] by [illegible] [illegible], [illegible] being [illegible] or [illegible].

The air that may be [illegible] [illegible] an inch [illegible] [illegible] [illegible] of [illegible] which may be [illegible] [illegible] or a fatty looking substance, the [illegible] from an [illegible] [illegible] has been due to [illegible] membrane of the intestine or it becomes abraded. The stools will be tinged with blood [illegible] some [illegible] of the [illegible] when which are [illegible].

But the most usual appearance of the stools is given upon the authority of [illegible]

It seems to when the [illegible] in [illegible] the are secreted, appears to me to be injury. The liver may be excited to secrete bile, and any interposition of the intestines, & the bile then becomes a source of irritation to the bowels, or if the bowels be previously affected the irritation may excite the liver to increased secretion. — Another way by which the bile may be reduced so copiously is — Vomiting. This may so far act on the Gall-bladder as to cause it to pour its contents into the intestines & sometimes into the stomach, thus interrupt the [illegible] — Thus the irritation of the bowels is very great the matter discharged is very green, & in the lowest state of excitement it will be brown. The blood issues from some of the tender vessels on the internal coats of the intestines, mixed with the bile & other secretions, easily accounts for such an appearance of the evacuations.

It —

It sometimes happens in cases of this kind that portions of coagulated milk will be found floating in the discharges from the bowels, as if the child received milk & water to quench its thirst which is always intense. The stools will be almost pure water, & mixed with bile. Sometimes bloody and mixed with mucus, but more frequently pale & fluid & of an intolerable & peculiar odour & easily penetrating the thickest folds of linen.

From the commencement the disease is attended by a high fever which the indistinctly marked is generally allowed to be of the remittent kind. The pulse is small, quick & very frequent & in extreme cases the pulsation ceases & each line so rapidly, as nearly to preclude the possibility of numeration.

There is also considerable inequality of temperature, it is not unusual to find one part excessively warm, while some others & particularly the extremities are being cold from

the

[illegible] of circulation are perturbation. &c. Dr. [illegible] says in some instances children [illegible] [illegible] forwards & sometimes make attempts to [illegible] & bite their parents, Nurses & [illegible]

If the disease be permitted to continue without any remedy, or if it be [illegible] [illegible] [illegible] emaciation, [illegible] [illegible] of symptoms [illegible] [illegible] the mouth becomes aphthous to a great extent, great emaciation takes place, the skin hangs [illegible] particularly so on the extremities. The eyes open dull & sunk [illegible] [illegible], & almost if not entirely insensible to surrounding objects. The little sufferer sleeps [illegible] in this situation it may continue for a little, but death results [illegible] [illegible] [illegible] symptoms [illegible] [illegible] [illegible] are but [illegible] cases of [illegible] or [illegible]

Treat

Treatment. Enough to lead a to cure of main the paroxysms or the symptoms a disease, cases in each instance, so augment the risk of Hydrophobia; must be a deviation with some hesitation from some the Commandments of humanity, or in which breast "the milk of human kindness has not ceased to flow."

The first symptom of the disease according to the foregoing description which calls for relief is the excessive vomiting.

The exhibition of an emetic is not the indication is thought to manifest, believed, subject to be hazardous, particularly if the stomach is irritable or sensitive to recent action, and if there is reason to suppose that the offending matter has been evacuated, or if the attack has been so sudden & violent, as to produce considerable prostration of strength, with a weak pulse & cold extremities. The

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administration of an emetic, would be unsafe & injudicious practice. Prior to subduing the heat, vomiting & nausea which remain, warm & stimulating epithemata should be externally applied. The hot water bath is one of the most powerful remedies for this symptom, especially when rendered more stimulating by the addition of salt & mustard or Cayenne pepper. & after the warm bath I would order a mustard or onion poultice to the Epigastrium, repeated every 3rd hour, till it proves successful.

Even a solution of Camphor in Spts. Turpent. or of Cantharid. mixed with Turpent. might prove singularly successful. —

At the same time I would order one or two tea spoonsful of Soda water & one drop of Laudanum; — Or what would be still more efficacious, one or two tea spoonsfull of lime water in a little Mucilage of Gum-Arabic.

When the offending matter has not been completely evacuated by spontaneous vomiting, I would not hesitate to give a mild dose of Ipecacuanha under the restrictions which should be attended to in the administration of Secret Medicines —

Our next attention is directed to the bowels, the matter which they contain, may be an constant source of irritation. To remove it we may employ Calomel, Castor oil or Magnesia.

In mild cases one or two grains of the Alterative mixture given occasionally will answer, but some indication which a purgative is deemed to meet, will be best fulfilled by Calomel. — Independent however of its purgative powers it exerts a direct & powerful influence over the nervous system. This valuable property of the Medicine should, & I believe generally does cause it to be ranked highest in the estimation of the best practitioners — The most eligible form of ad-

min-

administering it, or in combination with Opium & Ipecac. Do a child from 6 or 8 M.s to 1 year old the Ipecac. give a pill composed of from gr.iij to v. Cal. ... gr.iv Ipecac. & gr.ss or gr.j Opium every two or three hours. — or the Calomel may be given in minute doses, grain rubbed up with a little sugar, or is generally administered every 2 hours till the stools become natural.

After we have proceeded thus far in allaying the irritability of the stomach and given one or two purges to clear the bowels I would next try the astringency of the Dispensatories. a tea spoonful or two at a time with one or two drops of Laudanum according to the age & strength of the patient will sometimes succeed in stopping the remaining Diarrhoea — But neither from this nor from any other medicines are we to look for universal success. — At the same time we are giving the previously mentioned Medicines, we may

give

give injections of Starch, flaxseed tea, Gum water or any other demulcent; or we may give some of the astringent injections, decoction of Galls - Oak bark &c &c - One thing worth attending in giving injections is - to administer them in small quantities - they will thus have the desired effect whereas if they be given in large quantities as the generality of Nurses are in the habit of (until previously told) they will be ejected almost as soon as given.

It is natural to suppose the little patient would require some nutriment. - For, after the disease has been of some continuance, the child will be reduced to a state of great debility & much emaciated, before they stage or even as soon as the bowels have been evacuated & the irritability of the stomach ceases, we should begin to give some nourishment, I do not know that any thing will ans. better than Gum - Arabic Water, Rendered

Peas-

pleasant by the addition of some aromatics as a little cinnamon, cloves, or nutmeg. This preparation as far as I have seen it, has a greater effect than we could anticipate from it reasoning (a priori)

I have heard indeed that some practitioners treat the disease altogether on a diet of Gum-Arabic, confining the patient wholly to it, so much so, as frequently to render the discharge pure Mucilage;

If the child be not yet weaned & still able to suck, we will not be very anxious to give it much aliment. The Mother's milk is the most nutritious & at the same time the most natural support. — But in case the little patient's mouth become ulcerous, the Gum Mucilage will become an article of indispensable utility. — Under I think see the Gum arab. so well that I shall give it the Preference, — If general

hap-

a person in the state in which we are treating that the extremities are cold & the body coherent a common perspiration, but the warm water should be directed; — The principles on which it is invariable are so plain as not to require any further explanation.

Vinaigrettes may also advantageously be applied to the extremities.

The Summer (1822) I had an opportunity of testing a part of the plan of treatment which I have been endeavouring to lay down — Calling about the middle of July to see a former acquaintance — a respectable Lady — whose present distressed situation, is rendered even more poignant by "the remembrance of better days" I had observing her youngest child about ten months old, sick & ghastly. I enquired the cause, — From the manner in which she described the previous state of the

little —

sufferer, I knew it was in the last stage of Cholera Infantum — No Physician being in attendance, I directed the Mother to use the Warm Bath, & give the little Patient, two or three spoonful occasionally of a mixture of Raw Water Biscuit, grated down on boiled Raw-Milk, — She was also directed to administer a few injections of Starch — —

Having procured her some Port wine, she gave it in small quantities together with a tea spoonful or two of the decoction of Logwood. I honestly assure the friends employed I had the gratification to find that in 3 days the child was convalescent.

The warm bath having equalized the temperature & the internal application together with the injections stopped the frequency of the stools which on my first seeing the child were

green

green, & waters I voided in a state of effervescence. — I next ordered the cold bath & flannel roller round the child's abdomen & by these simple means, together with the little patient being carried out three or four times — I had the extreme pleasure of seeing it completely restored in the space of eight days from the time of my first seeing it.

I would not however attempt to say, that the treatment pursued in this & one or two other cases would prove universally successful, — For, as diseases are constantly varying, from change of season, peculiarity of constitution & other circumstances; the remedies applied must in like manner vary to meet the diff.t symptoms as they present themselves.

If the disease be obstinate in yielding to the remedies which have been recommended, I would not abandon the

patient,

Patient as there are numerous others which may be resorted to.

We have before us the whole catalogue of astringents in the Materia Medica both from the Mineral & Vegetable Kingdom; from the Vegetable however there are not more than three or four which I would use, viz the Galls, Logwood, Kino, & a species of the Blackberry, the latter for every laxative state of the bowels was a favourite remedy among the quacks & Nurses of my native country but was strenuously decried & opposed by the regular bred Physicians, from the very indiscriminate manner in which it was employed.

And I am disposed to believe that astringents are too readily employed, to the exclusion of those remedies which are calculated to correct the vitiated secretions of the abdominal viscera. — I have seen patients in the latter stage speedily recovered,

by

by the use of very small doses of Calomel also frequently injected, which no doubt acted as an alterative upon the hepatic & other secretions.—

About this stage the decoction of Hæmatoxylon Campeach. in a little port wine, or a little spiced Rhubarb might be advantageously given, or some weak brandy toddy sometimes proves serviceable.

As nutriment — we may direct a little jelly for the little Patient, or it may make a Decoction of sago & Arrow root. & Spices made palatable by the addition of some spices. — The Arrow root & Sago.

What I have known to answer uncommonly well in many cases, is the liquor of Clams or Oysters, we might infer from the good effects of it in scurvy, that it would be serviceable here. If on trial it has been found to justify the conclusion, by imparting

tone

tone to the Stomach & bowels.

A change from the town, to the country air has been strenuously recommended by the first Practitioners.— Drs. Chapman, Rush, & Miller, speak of it in the hyghest terms, & from the little which I have seen of the disease, the Measure seems to be attended with the happiest effects, insomuch that a change to the country will alone sometimes effect a cure after the best directed Medical efforts have failed.—

I have now finished what I intended to say on Cholera Infantum; and in my estimation there is no disease, the succesful treatment of which is better calculated to raise the Character of the Physician, to merit the present gratitude of the Parent & the future of the child, than the disease which we have been considering, & more Particularly so, as the little

Patients

Patients are generally brought to the lowest state

The Physician perhaps in the winter of life when "his head shall be silvered o'er with age" amidst the labours of his Profession, shall hear this pleasing salutation from his former juvenile Patient, now developed into Manhood & in the busy scenes of the world,

"This is the Doctor to whom I am particularly indebted for my life, whose assiduity & attention snatched me from a premature grave" Such an ejaculation from an individual of Merit, would more than compensate the thousand acts of Ingratitude, which Physicians are "alas!" but too liable to meet with in their progress thro' life. —

FINIS.